

## ABSTRACT

A wavelength exerciser is used for evaluating connections in an agile network. The exerciser operates at some or all switching nodes of the network, by first detecting the paths available between the respective node and all remaining nodes. For each available path, the exerciser selects some or all wavelengths that can carry the traffic all the way along the path. It can operate both during SLAT and/or during network normal operation. When the network carries live traffic, the wavelengths used on the test connections are wavelengths that are not used at the respective moment by the user traffic. The exerciser verifies the switch architecture and the access architecture, and also collects information about the performance of all paths, so as to speed-up the path-connection matching process and to increase the chances of successfully establishing the connection along the selected path.